



Carol L. Bjelland
Director
Regulatory Matters
October 16, 1997

GTE Service Corporation
1850 M Street, N.W., Suite 1200
Washington, D.C. 20036
(202) 463-5292

EX PARTE OR LATE FILED

Mr. William F. Caton
Acting Secretary
Federal Communications Commission
1919 M Street, N. W.
Washington, D. C. 20554

RECEIVED

OCT 16 1997

FEDERAL COMMUNICATIONS COMMISSION
OFFICE OF THE SECRETARY

EX PARTE: Cellular Service in the Gulf of Mexico
WT Docket No. 97-112
CC Docket No. 90-6

DOCKET FILE COPY ORIGINAL

Dear Mr. Caton:

This letter shall serve as notification that, on October 14, 1997, representatives of GTE Wireless met with the following Staff members from the Commercial Wireless Division of the Wireless Telecommunications Bureau: Wilbert Nixon; Linda Chang, Tim McGuire and Jay Jackson. The purpose of the meeting was to discuss in further detail many of the points raised by GTE in its Comments and Reply Comments filed in this proceeding. The attached materials were used in the course of the discussion. These materials reiterate and further illustrate GTE's position that its proposal to extend the licensed area of land-based cellular carriers into the Gulf of Mexico is the proposal that best serves the public interest.

Please include a copy of this notification, and the attached discussion materials, in the record of this proceeding in accordance with the Commission's rules concerning ex parte communications. Questions concerning this matter should be directed to the undersigned.

Sincerely,

Carol L. Bjelland

Attachment

CC: Participating FCC Staff Members

No. of Copies rec'd _____
LIST ABOVE



Cellular Service
In the Gulf of Mexico
WT Docket 97-112
CC Docket 90-6

DETRIMENTAL CUSTOMER IMPACT

- Poor Portable Coverage on the Beach Due to FCC Rules
 - 32 dBu contours do not provide adequate signal strengthSEE EXHIBIT I
- Unauthorized Roaming
 - In Texas, the Gulf Carriers' signal on the beach dominates the Land-Based Carriers' signal in many placesSEE EXHIBIT II
- No Cellular Service provided by Gulf Carriers off the Coast of Florida Southeast of the Panhandle

OPTIONS TO PROVIDE RELIABLE SERVICE TO COASTAL CUSTOMERS

- 1) FCC auctions unserved area in Coastal Zone
- 2) Land-Based transmitters placed by Gulf Carrier
- 3) Land-Based Carriers' CGSAs are extended into the Gulf

COASTAL ZONE AUCTION OPTION

- Unserved area creates opportunity for third party to apply for and be awarded Coastal Zone
- Third carrier's contour would infringe on both Land-Based and Gulf Carrier markets
- Further reduction and/or elimination of already poor beach coverage
- Unserved area will still remain in Coastal Zone
- If the FCC requires Land-Based & Gulf Carriers to pull back SABs, all of the problems above would be heightened and GTE alone would be required to shut down at least 9 cell sites along the Texas coastline

SEE EXHIBIT III

LAND-BASED TRANSMITTER OPTION

- Land-Based transmitters placed by Gulf Carriers would capture Land-Based Carriers' subscriber traffic
- Collocation
 - On Land-Based Carriers' existing towers, would still capture Land-Based Carriers' subscribers
SEE EXHIBIT IV
 - On piers, would require Land-Based Carriers to design their networks according to Gulf Carriers' plans
 - Would substantially increase Land-Based Carriers' capital requirements

EXTENDING LAND-BASED CGSA OPTION

- FCC should extend licensed area of cellular Land-Based Carriers 25 miles into the Gulf, 50 miles in Florida

SEE EXHIBIT V

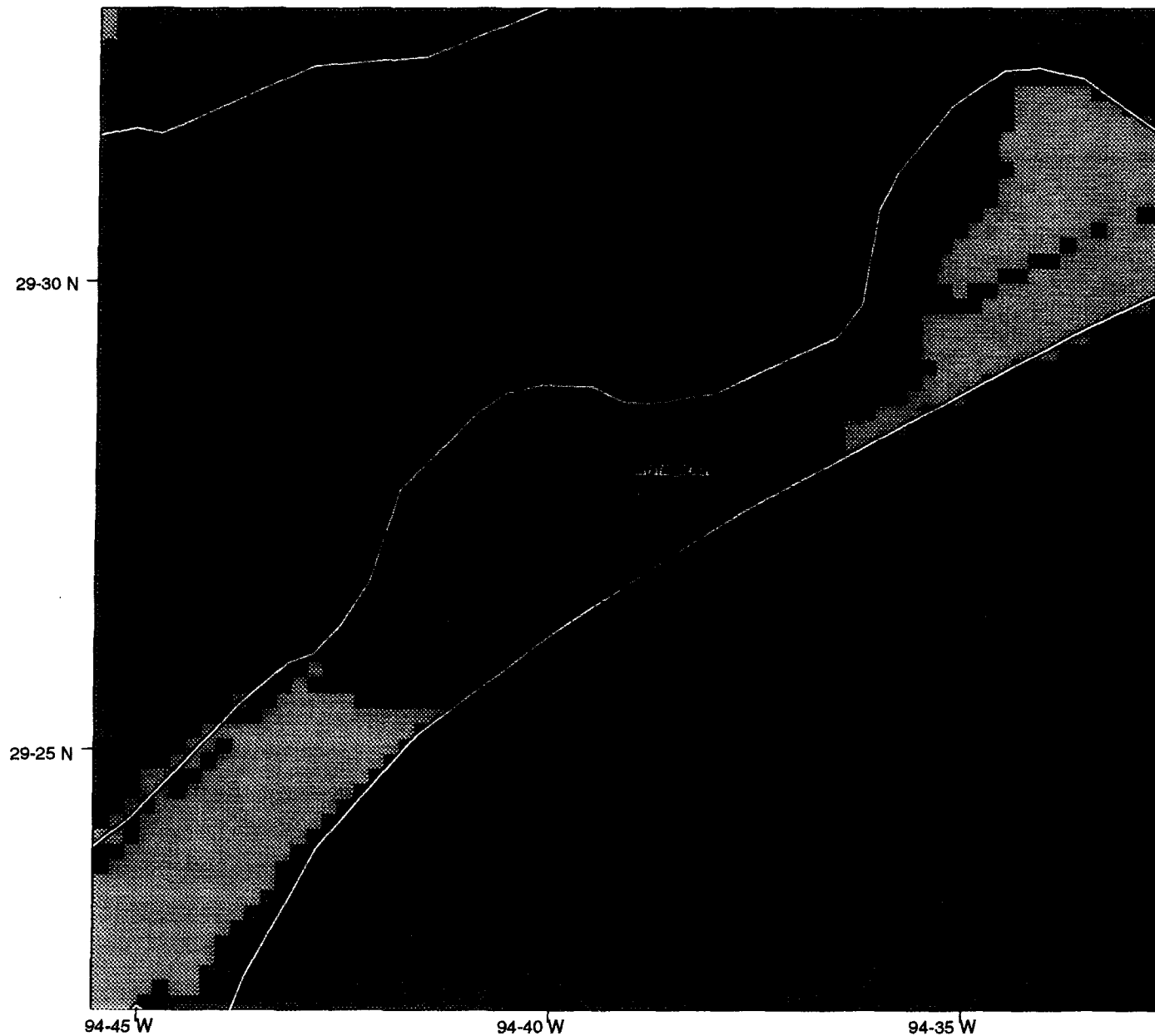
- The only proposal that is in the public interest:
 - Promotes reliable portable coverage on the beach and coastal waters

SEE EXHIBIT VI

- Reflects logical community of interest
- Provides public safety immediately
- Enhances competition with PCS carriers
- PCS Carriers' signals extend into the Gulf and Land-Based Carriers cannot compete with PCS along the coastline

EXHIBIT I

CURRENT CRYSTAL BEACH COVERAGE



HOUSTON_SETUPS
GRANET Ver 2.3.1 [Build 17]
Map # 61
UTM zone 14
User ID: ddurden
Mon Oct 13 14:33:34 1997

Signal Strength [dBm]

BELOW -95
-95 to -85
-85 to -75
ABOVE -75

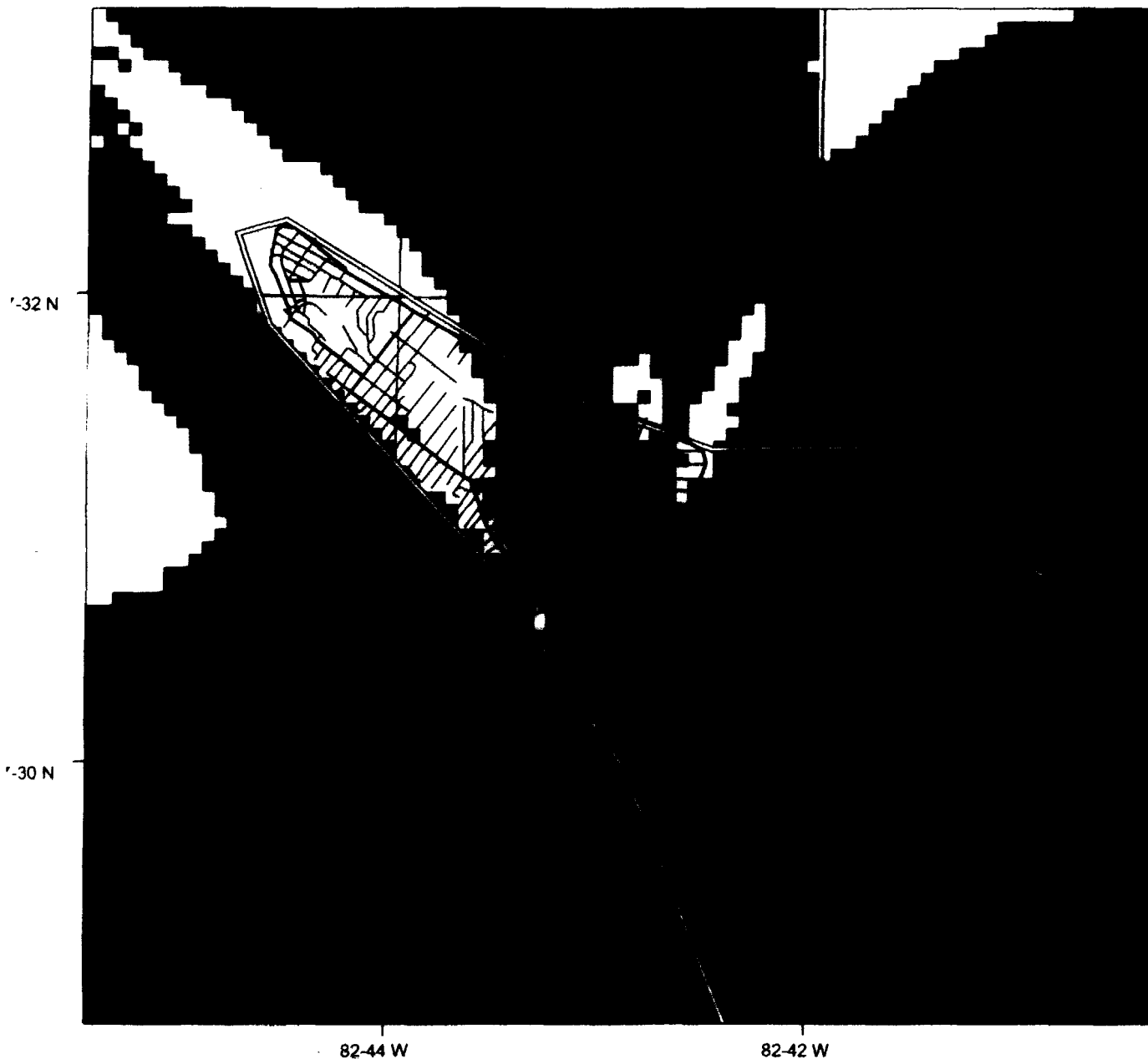
Scale 1:125,000

mile 0 1 2

km 0 2 4

GTE Wireless
3960 Braxton Drive
Houston, TX 77067

Portable Service with 6.4 Watts ERP Gulf Limitation



SARA_BRAD_CORE
GRANET Ver 2.3.1 (Build 17)
Map # 58
UTM zone 17
User ID: goldwing
Thu Oct 2 10:44:35 1997

Signal Strength [dBm]

BELOW -118
-118 to -90
ABOVE -90

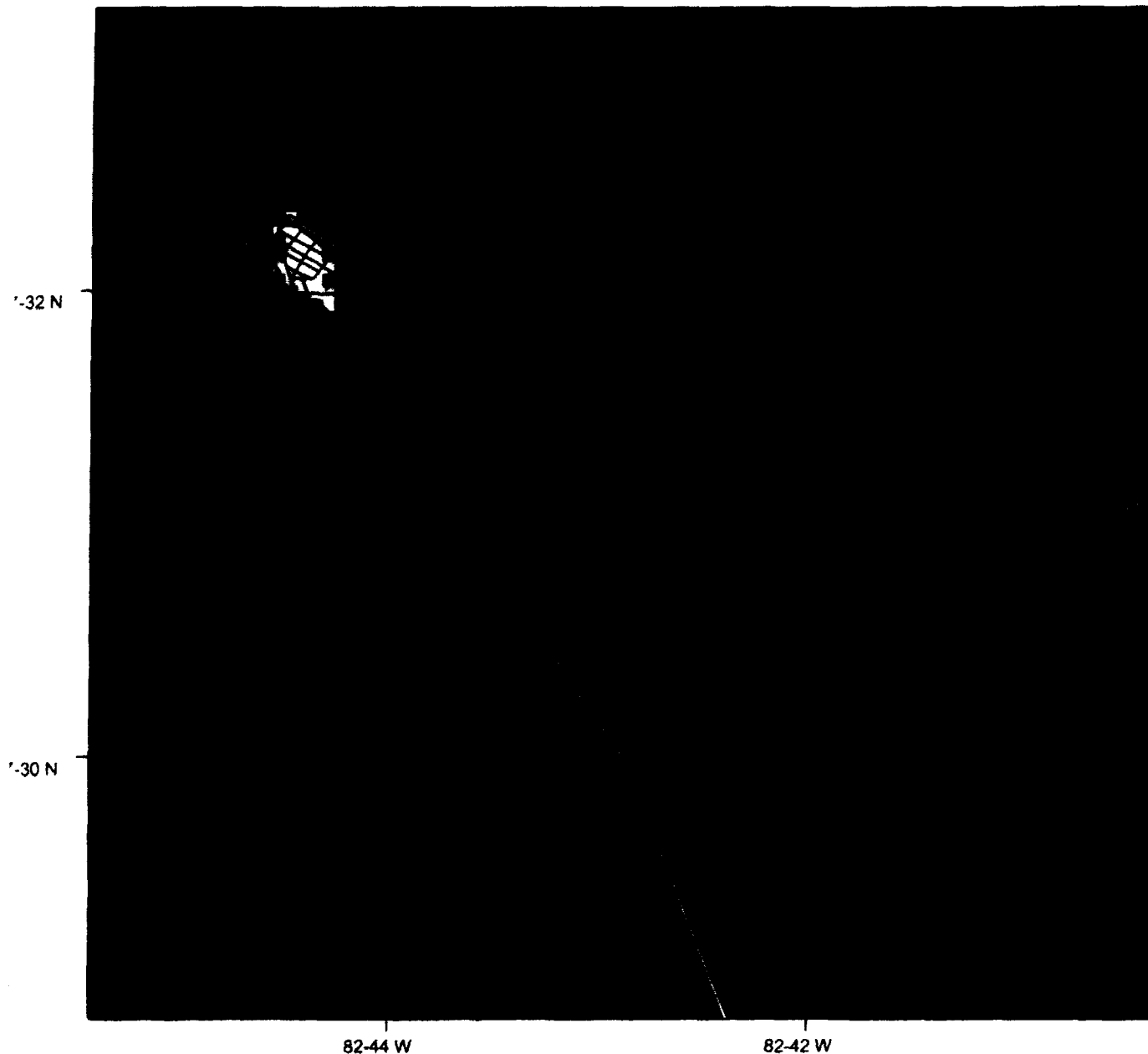
Scale 1:50,000

mile 0 0.2 0.4 0.6 0.8

km 0 0.5 1

GTE Laboratories Inc.
49 Sylvan Road
Waltham, MA 02254

Portable service with 100 Watts ERP



SARA_BRAD_CORE
GRANET Ver 2.3.1 [Build 17]
Map # 58
UTM zone 17
User ID: goldwing
Thu Oct 2 10:55:10 1997

Signal Strength [dBm]

BELOW -118
-118 to -80
ABOVE -80

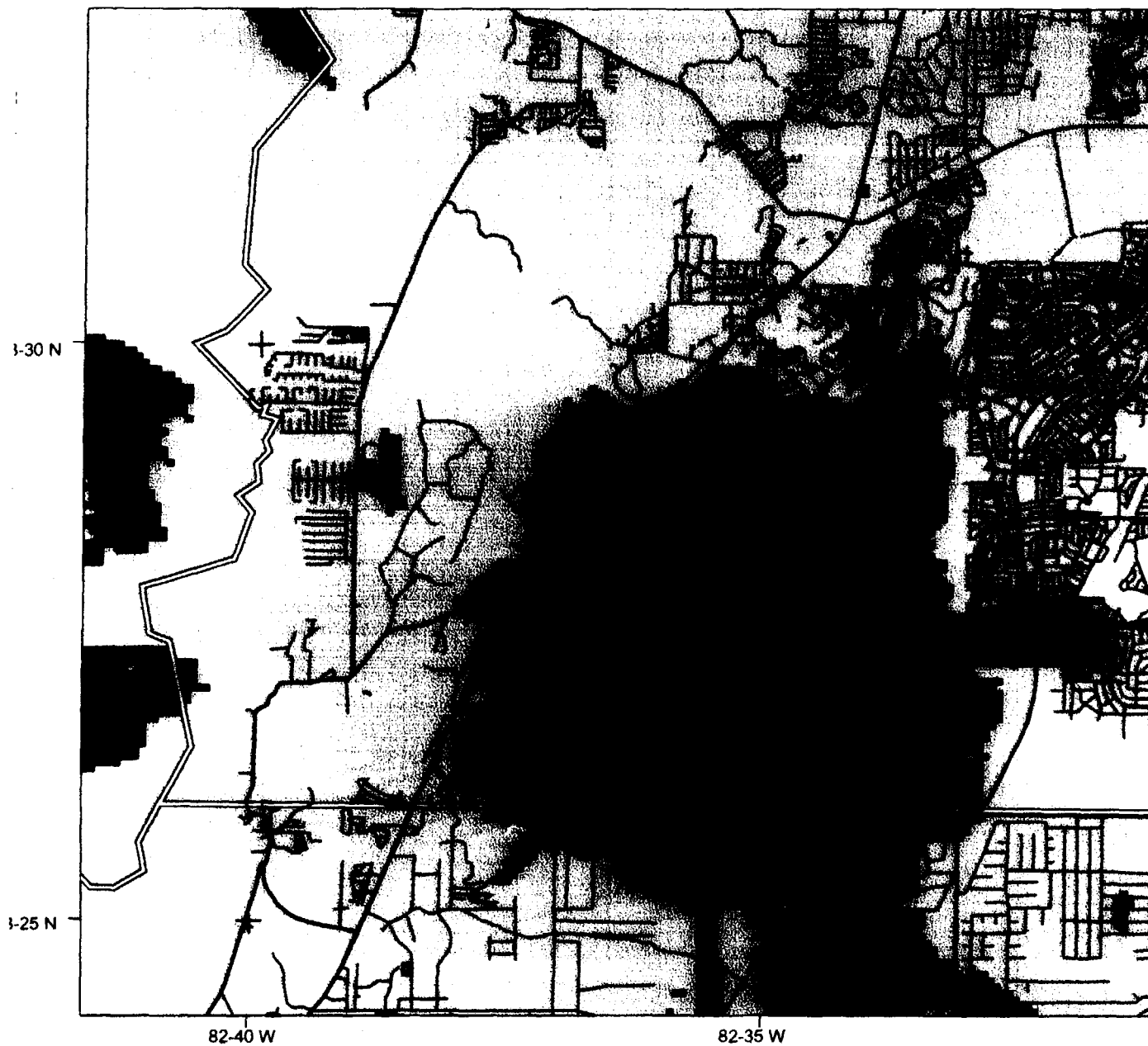
Scale 1:50,000

0 0.2 0.4 0.6 0.8
miles

0 0.5 1
km

GTE Laboratories Inc.
40 Sylvan Road
Waltham, MA 02254

Spring Hill Gamma with Gulf restriction; 16 Watts ERP



CITRUS RSA
GRANET Ver 2.3.1 [Build 17]
Map # 58
UTM zone 17
User ID: goldwing
Wed Oct 1 12:39:45 1997

Signal Strength [dBm]

BELOW -128
-128 to -80
ABOVE -80

Scale 1:100,000

mile 0 0.5 1 1.5

km 0 1 2

GTE Laboratories Inc.
40 Sylvan Road
Waltham, MA 02254

Spring Hill Gamma at 100 Watts ERP [Portable Service]

CITRUS RSA
GRANET Ver 2.3.1 [Build 17]
Map # 58
UTM zone 17
User ID: goldwing
Wed Oct 1 11:02:37 1997

Signal Strength [dBm]

BELOW -128
-128 to -80
ABOVE -80

Scale 1:100,000

mile 0 0.5 1 1.5

km 0 1 2

GTE Laboratories Inc.
40 Sylvan Road
Waltham, MA 02254

1-30 N

1-25 N

82-40 W

82-35 W



EXHIBIT II

Crystal Beach Drive Data 10/8/97

CH 335 = Galveston

CH 343 = Crystal Beach

CH 354 = Chambers

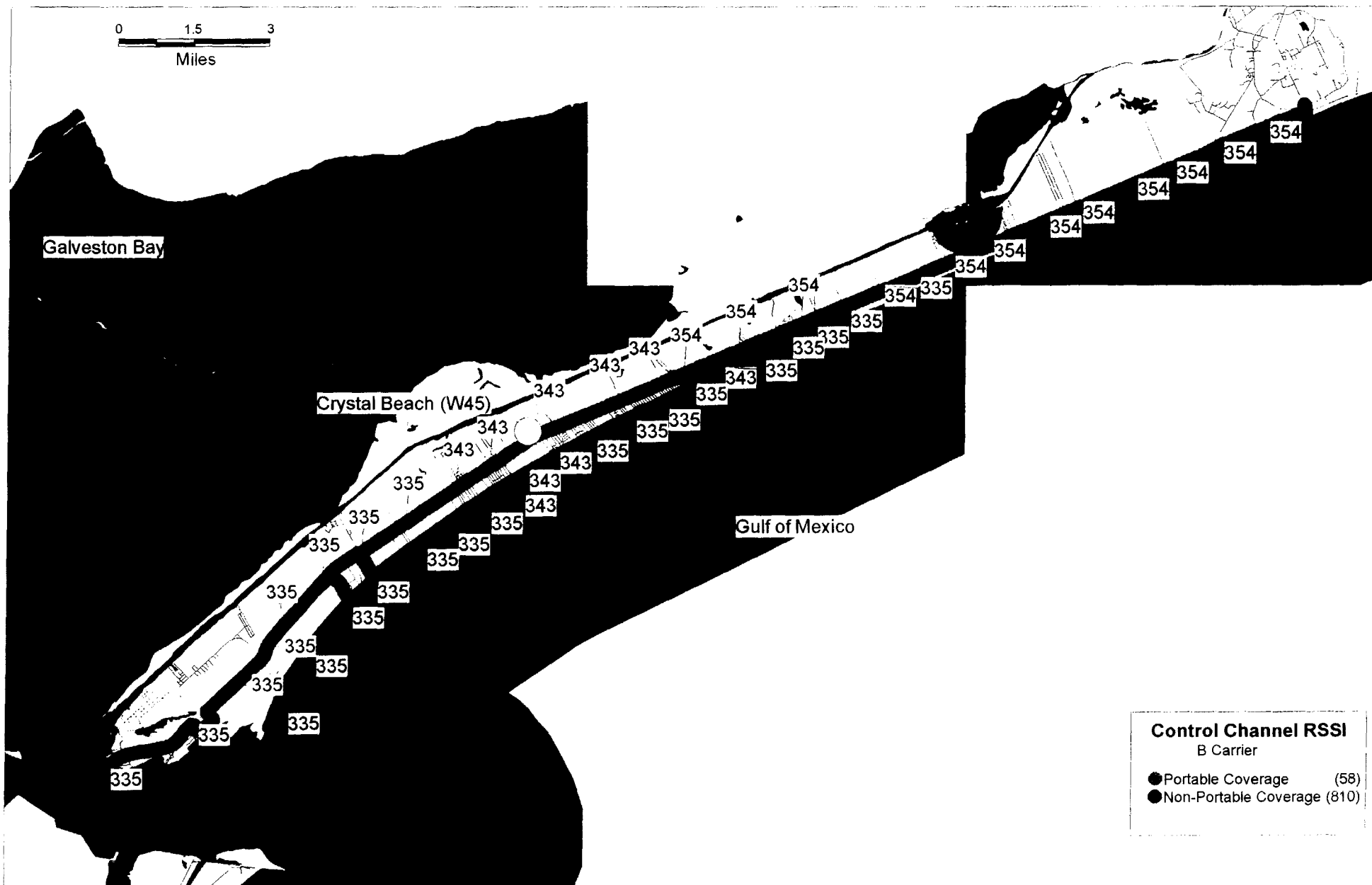
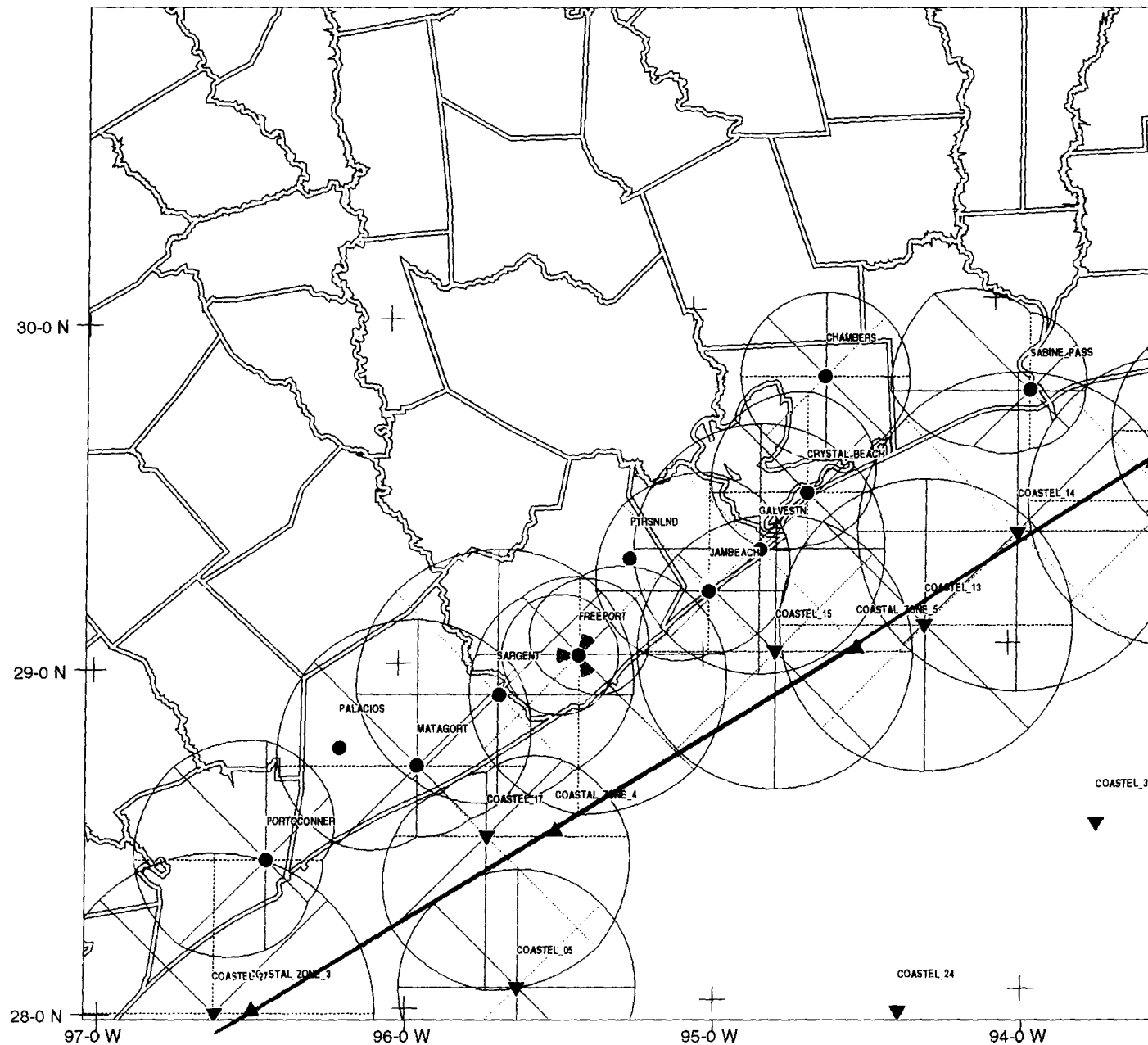


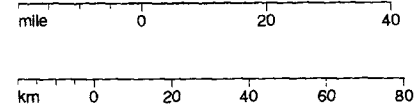
EXHIBIT III

CURRENT GTE/COASTEL CONTOURS



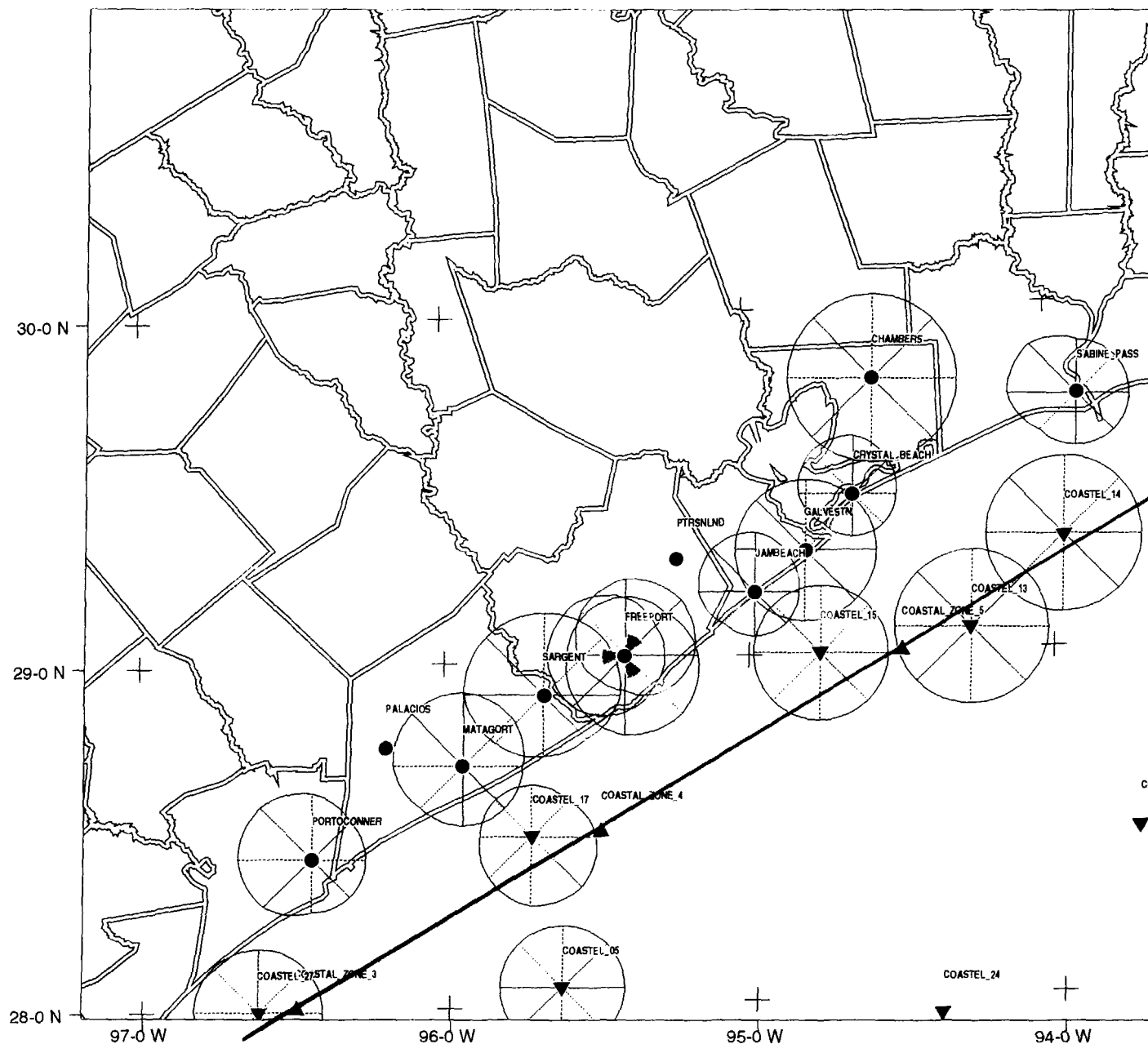
HOUSTON_SETUPS
 GRANET Ver 2.3.1 [Build 17]
 Map # 61
 UTM zone 14
 User ID: ddurden
 Mon Oct 13 13:33:00 1997

Scale 1:2,000,000



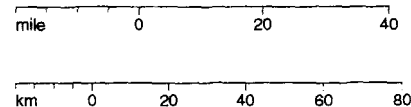
GTE Wireless
 3960 Braxton Drive
 Houston, TX 77067

GTE/COASTEL CONTOURS PULLED BACK FM COASTAL ZONE-ERP=1 WATT



HOUSTON_SETUPS
 GRANET Ver 2.3.1 [Build 17]
 Map # 61
 UTM zone 14
 User ID: ddurden
 Mon Oct 13 13:50:27 1997

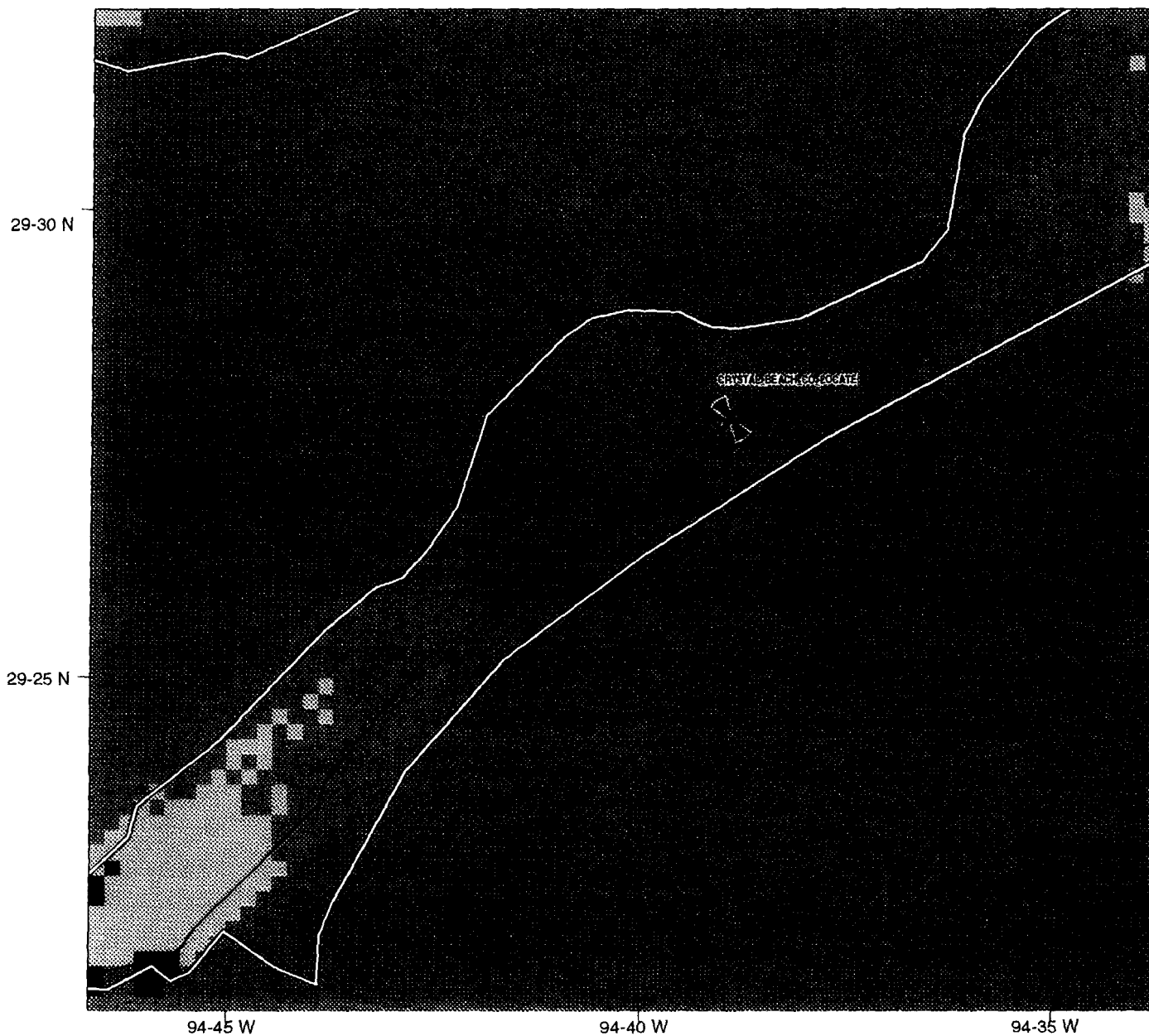
Scale 1:2,000,000



GTE Wireless
 3960 Braxton Drive
 Houston, TX 77067

EXHIBIT IV

CRYSTAL BEACH COVERAGE-GTE/COASTEL CO-LOCATION



HOUSTON_SETUPS
GRANET Ver 2.3.1 [Build 17]
Map # 61
UTM zone 14
User ID: ddurden
Mon Oct 13 13:13:31 1997

Signal Strength [dBm]

BELOW -95
-95 to -85
-85 to -75
ABOVE -75

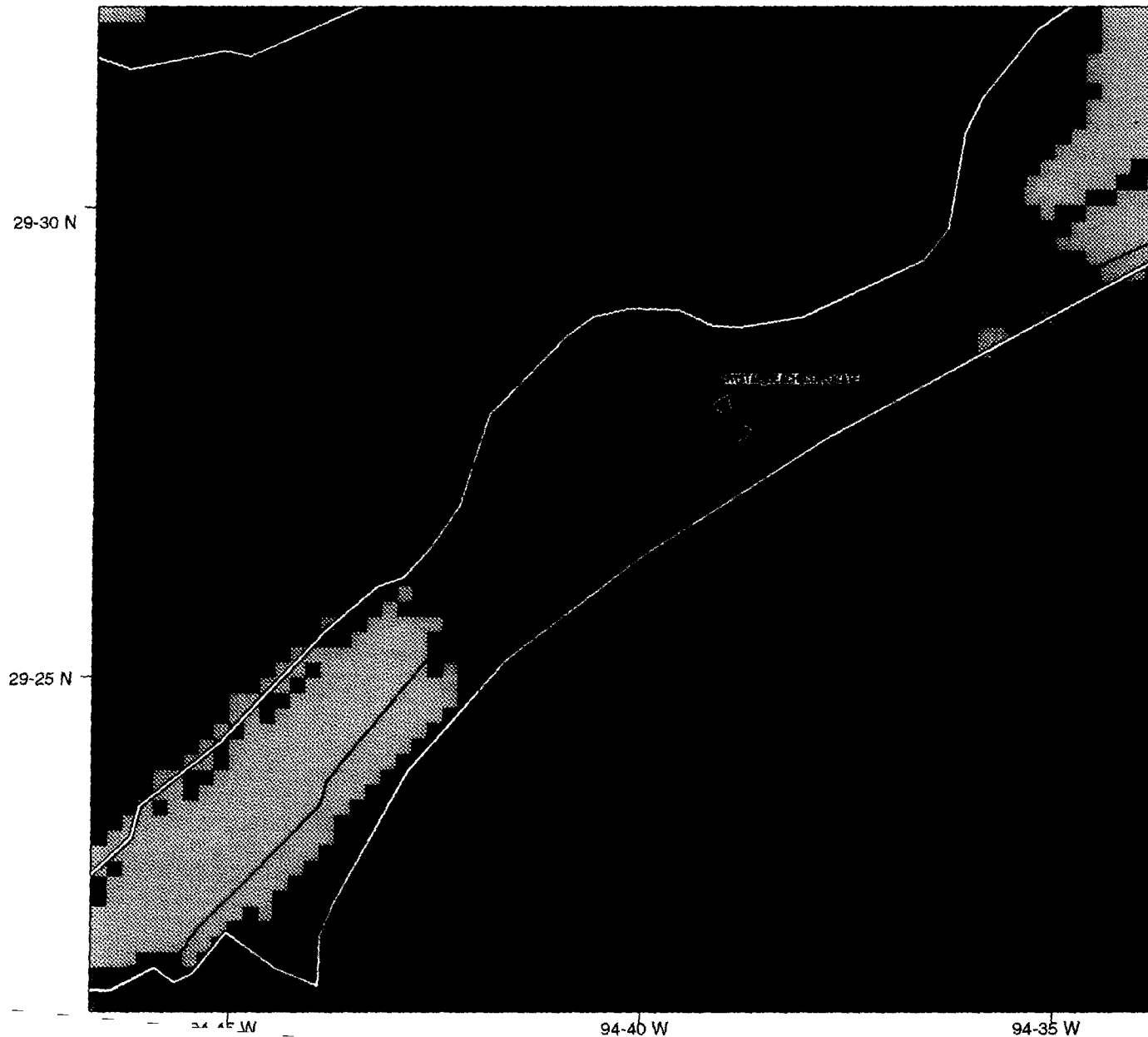
Scale 1:125,000

mile 0 1 2

km 0 2 4

GTE Wireless
3960 Braxton Drive
Houston, TX 77067

CRYSTAL BEACH BEST SERVER COVERAGE-GTE/COASTEL



HOUSTON_SETUPS
GRANET Ver 2.3.1 [Build 17]
Map # 61
UTM zone 14
User ID: ddurden
Mon Oct 13 13:17:28 1997

Sector/Site

1 CRYSTAL_BEACH_CO_LOCATE
2 CRYSTAL_BEACH_CO_LOCATE

Scale 1:125,000

mile 0 1 2

km 0 2 4

GTE Wireless
3960 Braxton Drive
Houston, TX 77067

Gulf Server configured for minimum Land Intrusion

SARA_BRAD_CORE
GRANET Ver 2.3.1 (Build 17)
Map # 58
UTM zone 17
User ID: goldwing
Tue Oct 7 13:56:47 1997

Section/Site

1 HOLMESBE
2 HOLMESBE
3 HOLMESBE

Scale 1:50,000

mile 0 0.2 0.4 0.6 0.8

km 0 0.5 1

GTE Laboratories Inc.
40 Sylvan Road
Waltham, MA 02254

43-32 N

43-30 N

82-44 W

82-42 W

EXHIBIT V

EXHIBIT V**Path Balance**

	Cell	Portable
ERP	+50 dBm 100 Watts	+27 dBm 0.5 Watts
12 dB SINAD	-120 dBm	-116 dBm
Antenna Gain	+15 dBd	0 dBd
Diversity Gain	+6 dB	0 dB
Line Loss	-2 dB	0 dB

Allowable Path Loss for useable call at 22 dB SINAD:

Portable to cell: $+27+120+15+-2+6-10$ (10 dB above threshold)=156 dB

Cell to Portable: $+50-116+0+0+0-10$ (10 dB above threshold)=156 dB

Path is balanced at 100 watts base station ERP with portable phones.

Path Balance

	Cell	3 Watt Mobile
ERP	+57 dBm 500 Watts	+35 dBm 3 Watts
12 dB SINAD	-120 dBm	-116 dBm
Antenna Gain	+15 dBd	+3 dBd
Diversity Gain	+6 dB	0 dB
Line Loss	-2 dB	-3 dB

Allowable Path Loss for useable call at 22 dB SINAD:

Mobile to cell: $+35+120+15+-2+6-10(10 \text{ dB above threshold})=164 \text{ dB}$

Cell to Portable: $+57-116+0+0+0-10(10 \text{ dB above threshold})=163 \text{ dB}$

Path is balanced within 1 dB at 500 watts base station ERP with mobile phones.

Therefore: If the Gulf Water Contour from the cell shows 40 miles the talkback to the base station will be one decibel better than the talk out at 500 watts base ERP.